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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,668	07/09/2003	Bruce G. Johnson	10012473-3	2599

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EXAMINER

TRAN, LY T

ART UNIT PAPER NUMBER

2853

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,668

Applicant(s)

JOHNSON, BRUCE G.

Examiner

Ly T. TRAN

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33 and 37-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 53-58 is/are allowed.
- 6) ☒ Claim(s) 33 and 37-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 51 and 52 are objected to because of the following informalities: method claims can't depend on apparatus claim. Appropriate correction is required.
2. Claims 51 and 52 recite the limitation "method" in line 1. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 51 recites no electrical charge but the dependent claim 44 recites electrical charge. The Examiner confuses what Applicant try to said.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 33, 38-42 are rejected under 35 U.S.C. 102(b) as being anticipate by Takei (EP 530627).

With respect to claims 33 and 41, Takei discloses a method of printing with an ink jet comprising:

- A supply of ink liquid ink comprising a carrier fluid (Fig.4: element 23C, M Y)
- An ink jet head using the ink for printing images on a transfer member that is adjacent to the print head and moveable with respect to the print head (Fig.4, Abstract);
- Evaporating some of carrier fluid form the image as the transfer member moves between the print head and a position at which the image is transferred from the transfer member to a sheet of the print medium and delaying transfer of the image from the transfer member to the sheet to allow evaporation of carrier fluid from ink of image (Abstract, because the ink is ejected on the drum then transfer to the paper, delaying is occurred)
- The transferring the printed image from the transfer member to a sheet of the print medium (Fig.4: element S);
- Wherein the transfer member is a transfer belt (Column 11: line 44-45) and the method further comprises absorbing carrier fluid from ink of the image with the transfer belt (Column 5: line 45-49)

With respect to claim 38, Takei discloses ink jet head comprises a page width array (Fig.4: element 23).

With respect to claim 39, Takei discloses cleaning the transfer member after transfer of the image to the sheet of the medium (Fig.4: element 22)

With respect to claim 40, Takei discloses a pinch roller for facilitating transfer of an image from the transfer member to the sheet of print medium (Fig.4: element 25).

With respect to claim 42, Takei discloses heating the transfer member (Fig.4: element 27).

With respect to claim 43, Takei discloses that wherein the electrical charge facilitates transfer of the images to the print medium (Column 10: line 1-10)

With respect to claims 44 and 52, Takei discloses an ink jet printing system comprising:

- Ink comprising a carrier fluid (Fig.1: element 1)
- An ink jet head (Fig.8: element 53) using the ink for printing images on a transfer member (Fig.8: element 51) that is adjacent to the print head and moveable with respect to the print head.
- The transfer member disposed to transfer an image to the print medium (Fig.8: S)
- Wherein the electrical charge facilitates transfer of the images to the print medium (Column 10: line 1-10)

With respect to claim 45, Takei discloses the transfer member comprises a transfer belt (Column 11: line 44-46)

With respect to claim 46, Takei discloses transfer member comprises a drum (Fig.8: element 51).

With respect to claim 49, Takei discloses a pinch roller for facilitating transfer of an image from the transfer member to the medium (Fig.8: element 55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 37 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takei (EP 530 627).

Takei in the embodiment 4, figure 4 discloses the claimed invention except that using full line head instead of scanning head. Takei in embodiment 3, figure 3 shows that full line head and scanning head is an equivalent structure known in the art.

Therefore, because full line head and scanning head were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute scanning head for full line head for the same purpose of ejecting ink.

6. Claims 48, 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takei (EP 530 627).

Takei in embodiment 8, figure 8 fails to teach a cleaning roller for cleaning the transfer member and heating element for heating the transfer member.

Takei in embodiment 4 teach the cleaning roller (Fig.4: element 22) for cleaning the transfer member and heating element (figure 4: element 27) for heating the transfer member.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a cleaning roller and the heating element as taught by Takei in embodiment 4. The motivation of doing so is to remove residual ink on the transfer roller and release absorbed water on the transfer member.

Allowable Subject Matter

7. Claims 53-58 are allowed.

The primary reason for the allowance of claim 53-58 is the inclusion of the limitation of method of printing with an ink jet printing system comprising adjusting a speed of movement of the transfer member to maximize evaporation of the carrier fluid. It is limitation found in each claims, as it is claimed in the combination, that has not been found, taught, or suggested by the prior art of record which makes these claims allowable over the prior art.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

May 27, 2005



Stephen D. Meier
Primary Examiner